

On the Approach



Administrator's Message



Dr. Jeff DeCarlo Massachusetts Department of Transportation (MassDOT) Aeronautics Division Administrator.

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Greetings from the not-so-new-guy! As I write this article, I have been at MassDOT Aeronautics almost exactly nine-months. To say that there has been a lot going on would be an understatement.

I have visited 22 of our 36 airports, and will continue to add to that number in the near-term. I have visited many of our airports more than once, usually because of construction project meetings or ground-breaking ceremonies for building projects. I continue to be impressed with the infrastructure investment and return on that investment. Often it is more about what you can't see (e.g., underground systems) that is most striking.

The MassDOT Aeronautics Team:

I have happy news to report. By the time this arti-

cle is published, we will be fully manned with a "lean and mean" staff of 13 (including yours truly). Mike Garrity joined our environmental team several months ago. Mike has a ton of experience in the airport planning and environmental area, and has a great understanding of aviation operations. Mike knows our airports extremely well, and has hit the ground running. More recently, our engineering team added Owen Silbaugh, a P.E. with significant airport engineering experience in MA and New England. In addition to engineering work, Owen is helping us with IT and project management systems, including the new Air-Port project management system. Owen replaced Kathleen Mahoney, our treasured friend, who accepted a full-time position with the

military. The good news is that Kathleen will continue to help us when necessary, on a part-time basis.

As many of you know, our finance director Michael Thompson left several months ago to accept another position with MassDOT. We miss Mike, but can't blame him for leaving, since he is now closer to his home and can walk to work. Well, Mike's replacement (and third new-hire) will start very soon. Our new teammate will remain nameless until the next issue, but I will say that without a doubt, he is very experienced and his transition will be seamless.

So, from a MassDOT Aeronautics team perspective, as a fully manned division, with experienced folks joining us, we will now be able to

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The Aeronautics Division's mission is to promote aviation throughout the Commonwealth while establishing an efficient integrated airport system that will enhance airport safety, economic development, and environmental stewardship.

Just Plane Folks— Featuring Ray Lehner

By: Sara Lagblam (Airport Engineer - MassDOT Aeronautics Division) , Ray Lehner (Teacher, Advisor-BVT)



Ray Lehner is a teacher and an advisor at the Blackstone valley Regional Vocational Technical High School in Upton, MA. For 15 years, he has advised the school's Aviation Club. Ray believes that "this club and the opportunities it provides are quite unique to any high school". Ray is an FAA-licensed pilot and certified flight instructor. Every year the club participates in different aviation related events and activities, such as the open house at Logan Airport and going on out-of-state field trips. Ray's passion for aviation and the aviation club seems to have inspired many students to attend aviation universities after high school and continue in that career path. One of his students is now a pilot for the Navy! On April 6-13 the club conducted their annual 8-day, out-of-state field trip to Florida to visit Aviation attractions. This trip has been conducted for 15 consecutive years. Students got to visit Kennedy Space Center and took a private "Up Close" tour, the Sun-n-Fun airshow in Lakeland FL, toured the Valliant Air Command Warbird Museum in Titusville FL as well as other attractions.

Below is a further description and Ray's vision for the Aviation Club:

kids look up at airplanes and helicopters as they fly their attention is even more focused. Something happens, probably the realities of life, and they lose this fascination with flight. The goal of the Aviation Club is to bring my passion for flight to our students and rekindle the love of aviation they already have!

This club will explore all history and science-related topics involved in aviation and flight. Airplane, helicopter, glider, lighter-than-air, and spacecraft technology will be investigated.

Topics will include aerodynamic principles of flight, aircraft performance variables, aircraft design and construction, aircraft structure and control surfaces, weight and balance, aircraft engine design and operation, maintenance specific to aircraft power plants and airframes, modern avionics including radio frequency ranges and usage

All children love airplanes! When they are young, they frequently put out their arms and make believe they can fly. All over. If it is a lighter-than-air craft like the Goodyear Blimp,



Blackstone Valley Tech students at VAB Kennedy Space Center

Just Plane Folks (Continued)

aviation weather, navigation, on-line flight planning, instrument operation, aerobatic flight maneuvers, and air traffic control.

In addition to regular meetings in school, a major goal of this club will be to enroll as many students as possible into the Experimental Aircraft Association's (EAA) Young Eagles Flight Program. This program has as a goal to provide a flight in a general aviation aircraft, free of charge, to young people between the ages of 8 to 17. As both advisor and Certified Flight Instructor, I will fly the members, free of charge, in my personal aircraft.

The other major goal of the club will be to plan to raise funds for a field trip to Florida to visit several aviation related sites. These sites would include the Fantasy of Flight Museum in Polk City, the Valliant Air Command Warbird Museum in Titusville, the Sun-N-Fun Airshow in Lakeland, IFLY in Orlando, and the Kennedy Space Center in Titusville.



Blackstone Valley Tech students at IFLY experiencing simulated skydiving



Blackstone Valley Tech students at Sun n Fun Airshow in front of P51 Mustang in Lakeland, FL



Blackstone Valley Tech students under Saturn V Moon Rocket at Kennedy Space Center

It is during these visits, the students will see first-hand all the wonders of flight ranging from the Wright Brothers to the Space Shuttle! All students will have an opportunity to become members of the Experimental Aircraft Association at a reduced rate. The EAA is a national organization dedicated to the promotion of sport aviation, preservation, and education. We have a chapter of the EAA here at school and students who become members of the EAA are also members of our local chapter. Students are also encouraged to become members of the Aircraft Owners and Pilots Association (AOPA). This club will also explore future possible careers in the aviation field as can be integrated to academic and vocational areas. ➔

Angel Flight Northeast –Celebrating 20 Years of Healing & Hope

By: Barbara Sica (Marketing & Communications at Angel Flight NE)

What would you do if you or a loved one was diagnosed with a life-threatening illness that required traveling hundreds or even thousands of miles away for medical treatment? If you're like most, the first question you would ask is "How will I get there?"

This is the exact question that many families are faced with when the only treatment is located so far away.

The Derosier family of St. Agatha, Maine was faced with this dilemma when both parents were diagnosed with cancer and the only treatment was located in Boston, MA. Their mother, Carol, required care at Beth Israel while their father, Richard, required care at Brigham & Women's. Travel in a car even in the best of weather could take from 8 to 9 hours one way and not to mention the expense of overnight accommodations. Not only was the Derosier family dealing with heartbreaking diagnoses but now the logistics of travel was just as big of a concern.



They were then told about Angel Flight NE – a nonprofit that arranges free air transportation so patients can access life-saving medical care that is not readily available to them either due to their geographic location or lack of finances to travel commercially. From the first call to Angel Flight NE, the children of Carol and Richard felt some relief to know that one leg of this journey would be taken care of and their parents would be in safe hands. Angel Flight NE arranged nearly 70 flights for their mother, Carol and 25 flights for their father, Richard. All for free - there was never a charge for the air transportation and there was also the opportunity for their family to accompany them when they were able to provide them support during a difficult time. Unfortunately, both Carol and Richard lost their battle with cancer but the Derosier family credits their parent's gift of time with them to Angel Flight NE.

This is just one of the many stories of the patients that Angel Flight NE has assisted over the past 20 years. At its height, the organization has coordinated between 80 to 100 flights in any

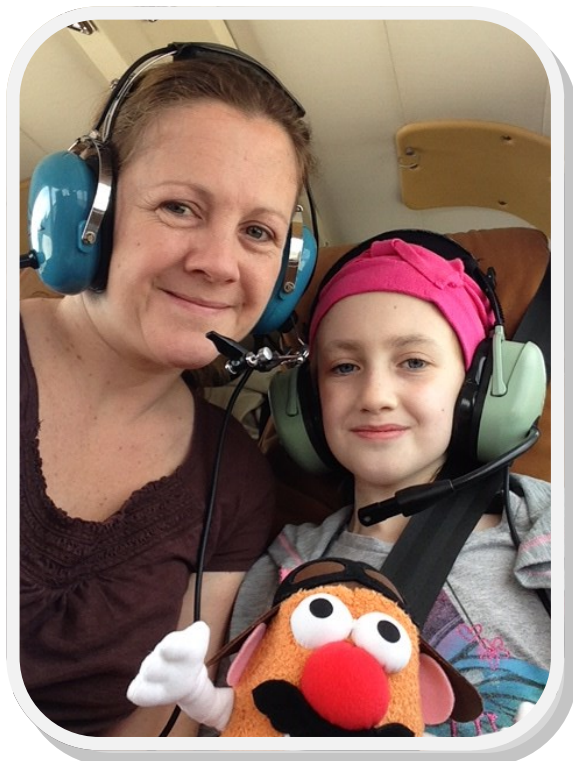
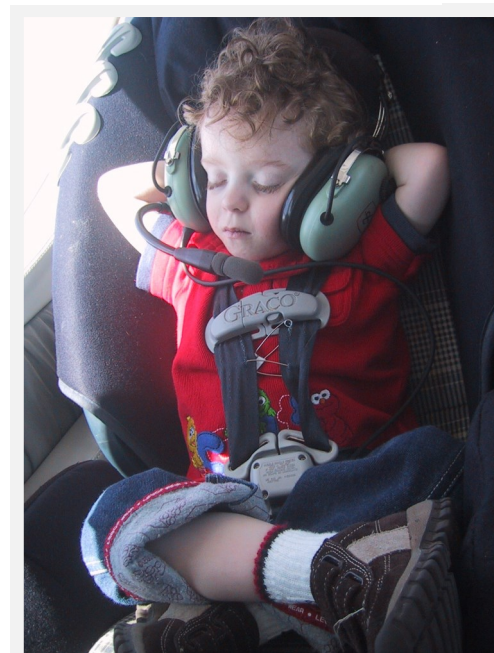
given week. Angel Flight Northeast is a 501 (c) (3) non-profit, tax-exempt organization that coordinates free air transportation for patients whose financial resources would not otherwise enable them to receive treatment or diagnosis, or who may live in rural areas without access to commercial airlines. There is never a charge to the patient or accompanying family members for Angel Flight NE's services. The organization is comprised of over 1,000 volunteer private pilots who combine their love of flying with the spirit of grassroots volunteerism by flying patients and families to the critical health care they need. Free air transportation is provided in private aircraft by volunteer pilots so that children and adults may access lifesaving medical care. Another vital component of Angel Flight NE's services is its Earth Angels program where volunteers generously donate their time and vehicles to transport

Angel Flight Northeast—Celebrating 20 Years of Healing & Hope (Continued)

patients to and from the airport / medical facilities.

Since Angel Flight NE's first flight in May of 1996, this nonprofit organization has ensured that distance is never an obstacle for children and adults to access life-saving medical treatment. Angel Flight NE's milestones over the past 20 years include:

- Flown more than 66,000 patients and family members.
- Traveled more than 13 million miles.
- Delivered canine paw protection booties for search efforts at the World Trade Center following 9/11.
- Facilitated Disaster Relief Missions to support initiatives in Haiti and New Orleans following Hurricane Katrina.
- Featured on numerous television stations including: WCVB Boston, CBS Evening News, Fox News, Fox25 Boston, CNN's "Headline News", NBC's "The Today Show", and Boston's ABC, NBC and CBS affiliates.
- Promoted awareness about AFNE's services in hundreds of regional and national publications including Atlantic Flyer, Beechcraft, The Business Review and Reader's Digest.
- Recipient of National Child Labor Committee's Special Lewis Hine Award.
- Awarded "The Hero Among Us" by the Boston Celtics and Boston Globe.
- Named Family Advocate of the Year by Boston Parents Paper.
- Honored as Community MVP by the New England Patriots Charitable.



"We are extremely proud to be celebrating this meaningful milestone of 20 years of service that has brought so much hope to thousands of patients and families," said Larry Camerlin, President and Founder of Angel Flight NE. "This journey would not have been possible without the commitment of our volunteer pilots, Earth Angels and the sponsors and supporters who have conveyed such faith and devotion in our mission. We look forward to continuing our mission for many years to come."

Angel Flight NE is based at Lawrence Municipal Airport, 492 Sutton St., in North Andover. To request a flight, call 800-549-9980. To learn more about the organization and how you can get involved, call 978-794-6868 or visit them online at www.angelflightne.org. ➔

Real World Design Challenge Award Ceremony

By: Steven Randing (Aviation Planner - MassDOT Aeronautics Division)

On May 19, 2016, the 2015 Real World Design Challenge (RWDC) Massachusetts State Champion, Newburyport High School, along with their Coach Sarah Leadbeater, met with Governor Baker for an award ceremony. During the ceremony, the students had an opportunity to take pictures with the Governor, as well as share their project notebook, which was presented during the national competition.



Pictured L to R : Jack Gobbi, Tucker Elmore, Nick Sundstrom, Governor Charlie Baker, Dan Bennett and Lauren Healey – Missing from photo Theo Dubus and Rowan Johnson.

In addition to winning the State Championship, Newburyport's "Jet Engineers" student team won the Judge's Award during the 2015 RWDC National Competition which was held in a virtual world format for the first time. The Judges Award is given to a team that shows unique efforts, performance, or dynamics that merit recognition. Newburyport won the Judge's Award for the overall quality of their work.

The 2015 RWDC National challenge focused on unmanned systems and precision agriculture through the design and implementation of an Unmanned Aerial Systems (UAS) to support precision agriculture, specifically the targeted and efficient application of pesticide to control local crop predation.

The MassDOT Aeronautics Division is proud to be a sponsor and participating state in this important Aeronautical/STEM program since its inception in 2009.

Congratulations to the Newburyport Jet Engineers! ➔

NASAO 2016 International Art Contest

By: Steven Rawding (Aviation Planner - MassDOT Aeronautics Division)

MassDOT Aeronautics is pleased to announce that Jidapa Janpathompong, from Fiske Elementary School in Lexington, MA, placed third (nationally) in the NASAO 2016 International Art Contest in the 10 to 13 years old category.



Above - 2nd Place Winning Entry Category II

The theme this year for the NASAO International Art Contest was “Air Sports in Harmony with Nature.” The artwork submitted depicted the “beauty of the earth...when seen from the air.” Congratulations to Jidapa! ➔



Attention airport managers and staff

Dear airport managers: Please be sure to send the Aeronautics Division your March 2016 Based Aircraft list. Thank you to the airports that have submitted.



MassDOT Statewide Vegetation Management Program – Beverly, Norwood and Southbridge

By: Nathan Rawding (Environmental Analyst - MassDOT Aeronautics Division)

In late Fall 2015, Beverly, Norwood, and Southbridge airports, in conjunction with MassDOT's Statewide Vegetation Management Program, all carried out maintenance activities, including selective cutting, heavy mowing, and herbicides as part of an ongoing effort to keep approaches and airspace clear of obstructions. Airports need to continually assess vegetation management needs, capabilities, and available management options as specified within the airport's ongoing maintenance plan, as part of their Vegetation Management Plan (VMP). The late fall weather cooperated with the crew from Vegetation Control Services, Inc. (VCS) to get all work completed by early 2016. MassDOT, with assistance from Stantec, is currently analyzing a new group of airports to include in the Statewide Vegetation Management program. Once the group is selected, conditions at each airport will be gathered during the summer of 2016, and maintenance work will take place in late Fall 2016. If you have any questions about the VMP Program, please contact Nate Rawding at Nathan.Rawding@state.ma.us, or Mike Garrity at Michael.Garrity@dot.state.ma.us ➔



Above: VCS, Inc. crew operating a tracked skid steers with a mulching attachment at Beverly Airport.

MAMA on the Hill Day 2016/ General Aviation Month

By: Lorraine Bobannon (Program Coordinator– MassDOT Aeronautics Division)

The group photo below was taken at the annual Massachusetts Airport Management Association (MAMA) On The Hill Day that was held at the State House on May 17, 2016. State Senator Donald Humason; pictured left in the front row, presented David V. Dinneen, MAMA's Executive Director and MassDOT Aeronautics Division Administrator, Dr. Jeff DeCarlo with a Proclamation signed by Massachusetts Governor Charles S. Baker designating May as Massachusetts' General Aviation Month ➔



Welcome Mike Garrity to the MassDOT Aeronautics Division Family

By: Mike Garrity (Environmental Analyst - MassDOT Aeronautics Division)



Mike Garrity recently joined the MassDOT Aeronautics Division as an Environmental Analyst working on airport planning and environmental projects. He began his aviation career working for United Airlines loading aircraft in the daytime and working as an aircraft mechanic in the evening. Mike brings over 25 years' of aviation planning and permitting experience, including work at national and international airports as well as many of our regional and local airports in New England.

Mike's project experience ranges from research to determine the economic benefits that aviation provides to airport improvement projects, to creating alternative improvement designs for permitting and defining new noise abatement procedures. He has provided assistance to several large

hub airports including BOS, BWI, PHL, CLE, and many local and regional general aviation airports. His expertise with planning and environmental issues includes such areas as; land acquisition projects, siting studies, capacity studies, environmental impact assessments, permitting documents, demand studies, aircraft and auto parking studies and design, development plans, and phasing plans. He currently is working with airports in an effort to improve energy efficiency and identify sustainability options. Mike can be reached at 617-412-3690 and at: michael.garrity@dot.state.ma.us. ➔

Welcome Owen Silbaugh to the MassDOT Aeronautics Division Family

By: Sara Laghnam (Airport Engineer- MassDOT Aeronautics Division)

The Massachusetts Department of Transportation (MassDOT) Aeronautics Division would like to welcome the newest team member, Mr. Owen K. Silbaugh, Jr., PE!

Owen recently joined the Aeronautics Division as a Project Engineer and will be working on various airport engineering projects and programs at the 36 public-use airports within the Commonwealth. In addition, Owen is taking over as the point-of-contact and administrator for the Airport Information Resource Portal (or AIR-Port). Owen brings over 10 years of experience in aviation and airport engineering, design, and planning including design, construction, project management, quality assurance reviews, airfield lighting, grading, safety plans, and pavement design.

Owen graduated from Carnegie Mellon University in 2002 with a BS in Civil and Environmental Engineering and from the University of Pittsburgh in 2004 with a MS in Structural Engineering. Owen is currently licensed in the Commonwealth of Massachusetts and the State of New Hampshire as a Professional Engineer. Owen previously worked for the Pennsylvania Department of Transportation (PennDOT) as a highway design engineer, Gale Associates as a Project Manager and Resident Engineer, and McFarland Johnson as a Project Manager. ➔



Shoreline Aviation Safety Day

By: Lorraine Bobannon (Program Coordinator– MassDOT Aeronautics Division)

MARSHFIELD – The cacophony of fire truck sirens blaring, police Harley Davidson engines revving, canines barking and occasional aircraft landing was not the soundtrack of a natural disaster – it was a mighty display of lifesaving capability. The Marshfield Harbormaster Department showcased public safety equipment, agencies and personnel at the town airport for the annual Marshfield Safety Day that was held on Saturday, May 14, 2016. Nearly 1,000 locals came to see the expo, which spanned the entire 140-acre airport and included police departments from as far north as Somerville and as far south as New Bedford.

About 30 organizations participated in the event which included demonstrations, displays, trainings and children's activities, including K-9 demonstrations, fingerprinting and flight simulators.



MassDOT Aeronautics Flight Simulator



Some participating organizations include Woods Hole Oceanographic Institute, U.S. Coast Guard, Civil Air Patrol, the Massachusetts Emergency Management Agency and Federal Emergency Management Agency, the Transportation Security Administration, Plymouth County Sheriff's Department, Metro-LEC SWAT Team and Mobile Operations, the Massachusetts State Police

and Environmental Police, as well as local police from Marshfield, Boston, Quincy, Plymouth, New Bedford and Scituate.

"Safety is something that happens in everybody's everyday lives," Marshfield Airport Manager David Dinneen said. "In an emergency situation, time is life."➔



K— Drug Detection Demonstration

Administrator's Message (Continued from page 1)

serve you better than ever. Of course, we will continue to accomplish all of the previous program and project work. However, we will also be breaking new ground in many areas.

The “New Ground” Performance IT System:

What do I mean by the new ground? Well, it depends on what area we are talking about. The first “new ground” is related to our concerted effort to accurately measure how well we deliver our services to you, by measuring our performance via metrics. The vision for this performance management and measurement system is a fully integrated software system that interfaces with the new Air-Port project management system. This effort will require everyone’s participation, including our airport management team and consultants. The system will include a series of dashboards (with drill-down capability) to allow us to see how well we are doing in real-time. For example, at any point in time, we will be able to see what percentage of a project is complete, and how much we have spent on that project. That data can then be compared to our individual project plan, or aggregated by project category. We will be talking about this more in the future. The bottom line is that we will have better situational awareness (SA), and we will translate this SA to improved performance and more efficient stewardship of federal and state dollars.

Drones: Threats and Opportunities:

Another area of new ground is unmanned aerial systems, aka drones. I was in DC several times recently, and have been told over-and-over by our legislators that they prefer the one syllable word drone(s) to the FAA-preferred unmanned aerial systems (UAS), or the term unmanned aerial vehicles (UAV). So, with that said, please bear with me when I use the legislator-preferred nomenclature.

Radio controlled (RC) model aircraft (and clubs) have been around for many years, with both fixed wing and rotary wing model aircraft. However, with the addition of GPS, cameras and other sensors (e.g., software for survey or inspection), this old technology has new capabilities to do either bad things (the drone threat) or good things (the drone opportunities).

For the drone threat, the idea is to protect public safety and privacy. MassDOT Aeronautics, the MA Attorney General’s office, and a few selected state partners are studying the need for statutes and regulations on drones. We have studied what other states have done with regard to drone statutes and regulations, and are considering formalizing a drone working group (DWG). The planned DWG may also study anti-drone technology, such as situational awareness technology that can detect and report the airborne presence of drones near airports. Other anti-drone technologies include geo-fencing, a system



Administrator's Message (Continued from page 11)

that creates a sort of invisible electronic barrier to drones to protect airport approach and departure corridors. For the drone opportunities, the idea is for the Commonwealth to leverage drone technology to improve the lives of our citizens, create new businesses, and generate positive economic impact. There is a sort of dilemma and paradox, because if we regulate too much to protect against the threat from drones, we may stifle the innovative use of drones. We will find a balance in this area, and MA will continue to be one of the foremost innovative states.

Heliports & Seaplanes:

As we speak, sites are being vetted for a Boston Heliport. The objective of the heliport site assessment is to analyze alternative sites and recommend the best of the alternatives. Another exciting effort is the study of potential seaplane service between Boston and New York City. Recently, two airlines conducted trial approaches and landings in the Boston harbor. There will be much more on both of these topics in the coming months.

Other New Ground:

There are a lot of "other" new ground efforts moving forward, including the MassDOT Aero Stem initiative. It is an effort to get our children and young adults interested in Science, Technology, Engineering and Math by using the very exciting aviation setting as a motivator. I will communicate more on this in the future. Sara Laghlan, a member of our engineering team and self-proclaimed newsletter editor has directed me to stop writing for now, since I am running out of room. I look forward to speaking to you in the next edition of the newsletter! ➔



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Logan Office Center
One Harborside Drive
Suite 205N
East Boston, MA 02128
617-412-3680

www.mass.gov/massdot/aeronautics

Send suggestions for stories or comments to:
Sara.laghlan@state.ma.us or
617-412-3617

We're on the web!

www.mass.gov/massdot/aeronautics



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